

14 December 2007

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Dear Sir,

Utility Patent Registration In USA

Invention: A SMALL FOUR-STROKE GASOLINE ENGINE WITH OIL MIST LUBRICATION

Registration No: US 7,243,632

Registration Date: 17 July 2007

Registrant: HU, Ji-Rong

Docket No.: 10034

I refer to the above registration. I noticed the name of the Registrant on the registration certificate was erroneously typed as "Ji-Rong No HU" instead of "Ji-Rong HU". I also found that the name of the Registrant is correctly entered in your database. Therefore, I believe it is a typo on the certificate. I would be grateful if you could amend the name of the Registrant on the certificate and issue a corrected certificate in replacement as soon as possible. Please acknowledge receipt of this facsimile by return fax to the Applicant's domestic representative on (484) 676 2178.

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10034



US007243632B2

(12) **United States Patent**
Hu

(10) **Patent No.:** **US 7,243,632 B2**
(45) **Date of Patent:** **Jul. 17, 2007**

(54) **SMALL FOUR-STROKE GASOLINE ENGINE WITH OIL MIST LUBRICATION**

→ (76) **Inventor:** **Ji-Rong No Hu**, Office of the Chief Engineer, Xingyue Group, Gushan Industrial Area, Yongkang City, Zhejiang Province (CN) 321307

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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F01M 1/00 (2006.01)

F01M 1/04 (2006.01)

(52) **U.S. Cl.** **123/196 R; 184/6.5; 184/6.26; 184/11.1; 184/104.3**

(58) **Field of Classification Search** **123/196 R; 184/6.5, 6.8, 6.9, 6.26; 11.1, 104.3**

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,394,061 B2 * 5/2002 Ryu et al. 123/196 R

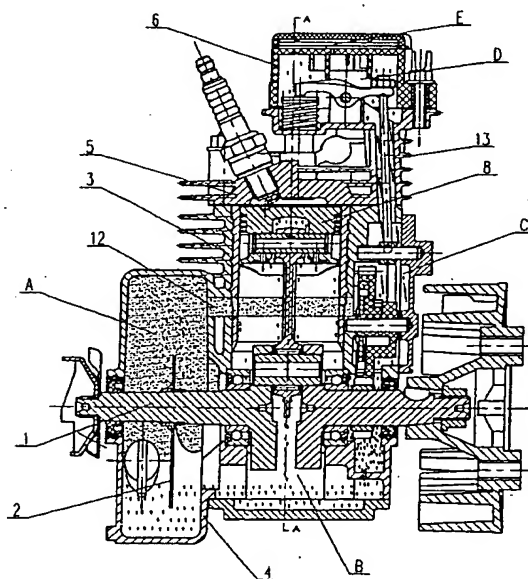
* cited by examiner

Primary Examiner—Noah P. Kamen

(57) **ABSTRACT**

The present invention relates to a small four-stroke gasoline engine with oil mist lubrication. The lubrication oil way of the engine includes a crankshaft chamber B, a camshaft chamber C, an upper rocker arm chamber D and a condensation chamber E. The camshaft chamber C communicates with the upper rocker arm chamber D via a tappet cavity 13. The upper rocker arm chamber D communicates with the condensation chamber E. An oil mist chamber A is surrounded by an upper case body 3 and a lower case body 4 at the side of the crankshaft chamber B, the bottom of the oil mist chamber A communicates with the crankshaft chamber B. An oil splash impeller 2 is fixed on a crankshaft, which extends into the oil mist chamber A. An oil way 12 is provided on the upper case body 3 between the oil mist chamber A and the camshaft chamber C. An oil return way 15 is provided on a cylinder head assembly 5. An oil return way 14 is provided on the upper case body 3. An upper interface of the oil return way 15 communicates with the upper rocker arm chamber D, a lower interface of the oil return way 15 communicates with the oil return way 14, and a lower interface of the oil return way 14 communicates with the crankshaft chamber B. The conventional lubricating mode is changed by the structure of the invention, which makes use of the pressure change during the reciprocating movement of a piston assembly 8 to attain the circulation of oil. The structure is simple, reliable in operation and has small consumption in power.

3 Claims, 3 Drawing Sheets





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10/569,027

SMALL FOUR-STROKE GASOLINE ENGINE WITH OIL MIST LUBRICATION

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Bibliographic Data

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Title of Invention:

SMALL FOUR-STROKE GASOLINE ENGINE WITH OIL MIST LUBRICATION

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